

Why Fertility Has Declined Everywhere

di Claudia Goldin

Over the past half-century or so, birth rates have declined in virtually every country, suggesting that there is a common factor at work. As women have gained more agency, a mismatch has emerged between what they need to enjoy the fruits of their autonomy and the credible commitments men can make.

CAMBRIDGE – Although declining fertility has been a much-discussed subject in the United States and several European and Asian countries in recent years, the trend has actually been nearly ubiquitous over the past half-century. Virtually every country in the world has experienced a significant decline in its birth rate.

As of 2022, more than half of the 193 countries in the United Nations – a group containing two-thirds of the world’s population – already had a total fertility rate below the replacement level of 2.1 children per woman. Following the fertility declines in developed countries like the US decades ago, many other countries have recently joined the club, presenting us with one of the great demographic surprises of the modern era: a negative relationship between per capita income levels and fertility.

Economists have studied this relationship since the 1960s, offering a variety of explanations – from the argument that lower-income households and countries lacked access to contraceptive knowledge and technologies, to the hypothesis that the “full” price of children could rise with incomes as parents sought to provide the very best health care, education, and training for their offspring. But many of these explanations proved either wrong or incomplete.

For example, the trend continued even as modern contraceptive practices spread, indicating that something else was driving higher-income households to have fewer children than their lower-income counterparts. Providing effective contraception or

legal abortion is neither sufficient nor always necessary to reduce the birth rate, as evidenced by the substantial decline of the US birth rate in the 19th century. For a sustained and substantial reduction in the birth rate, childbearing-age people also must choose to have fewer children; and to increase the birth rate, couples must want to have more children, and women must be assured that their children will be cared for.

As my own [research](#) shows, the major factor in the decline of fertility is the increased agency of women who must cope with the uncertainty of not knowing whether they can reap the financial and personal rewards from their education, and whether their children will have sufficient resources. The real fertility problem may lie in a mismatch between what women need to enjoy the fruits of their autonomy and what credible commitments men (and governments) can make.

For a woman who can obtain more education and pursue a career, a core consideration in having a child is whether the father will share the burden of household labor. Without such assurances from potential fathers (or from governments, in terms of childcare benefits and transfers), she may delay or refrain from having children to allow for increased employment. The more that men can credibly signal they will be dependable “dads” and not disappointing “duds,” the higher the birth rate will be in the face of greater female agency. When men do not have similar priorities as women, however, the mismatch may lead to large reductions in fertility.

Whether we are looking at the US or at other countries that developed rapidly at some point after World War II, the prime driver of low fertility is the increased agency of women, reinforced by a lack of change among men. But this does not mean that the story is the same across all countries.

In the US, the birth rate plummeted some time ago, owing to women’s greater ability to marry later, get more education, and obtain more job experience before marriage. Because women had more autonomy, they had more options; and because the relative earnings of college-educated workers greatly increased, their options became more valuable. Meanwhile, the share of dependable men (dads, not duds) may not have increased, implying that the opportunity cost of children may have risen for more-educated women.

In other cases, the story centers on the speed of economic growth and the resulting conflicts between generations and genders. My own modeling shows that the faster the per capita economic growth, the more the level of births desired by men relative to the level desired by women will diverge. Hence, countries that experienced economic stagnation followed by bursts of economic growth in the 1950s, 1960s, and 1970s ended up with larger decreases in fertility than countries with more steady postwar economic growth.

The reason is that rapid growth provides little time for traditions to catch up with economic reality. Men tend to be more attached to the traditions of their parents and grandparents, whereas women have considerably more to gain from breaking with them. It is not that men are inherently more traditional than women. Rather, they benefit more from patriarchal traditions, whereas women experience greater gains from more equal gender roles. In periods of rapid development, especially when populations experience large migrations from rural to urban areas, sons gain more from remaining partly in the past, while daughters gain more from taking fuller advantage of the present, when they can increase their education and employment.

In fact, what sons gain is evident from the division of labor in the home. Men in currently developed countries that modernized rapidly do considerably less housework and care work in their homes, relative to women, than do men in countries that had more continuous growth trajectories.

All told, the decline of fertility across vastly different countries and societies suggests that a common factor is at work. The trend has closely followed increases in women's ability to marry whom they want and when they want, to be able to invest in their education and in their future, and to have secure and dependable reproductive freedom. At the same time, mismatches in society and in individual relationships, the problem of commitment, and the inability to write binding contracts have each contributed to birth rates that are lower than optimal.

What is to be done? In the case of the US, [statements](#) from government officials and private-sector leaders, as well as recent [surveys](#), reflect a belief that social norms have moved too far toward gender egalitarianism. But reversing this could increase the degree of mismatch and lower the birth rate even further.

In the absence of sufficient changes to guarantee support for potential mothers, greater female autonomy will produce lower birth rates. Fortunately, that also means that with sufficient guarantees of support, greater female autonomy should lead to higher birth rates, greater female productivity in the labor market, and more equitable, happier families.